



PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

SHEILA C. HOLMAN
Director

January ##, 2017

Mr. Michael Callegari
Environmental Services, Manager
Transcontinental Gas Pipe Line Co., LLC – Station 150
P.O. Box 1396
Houston, TX 77251-1396

SUBJECT: Air Quality Permit No. 08044T17
Facility ID: 4900225
Transcontinental Gas Pipe Line Co., LLC-Compressor Station 150
Mooresville, North Carolina
Iredell County
Fee Class: Title V
PSD Status: Major

Dear Mr. Callegari:

In accordance with your completed Air Quality Permit Application for Renewal of your Title V permit received December 17, we are forwarding herewith Air Quality Permit No. 08044T17 to Transcontinental Gas Pipe Line Co., LLC – Compressor Station 150, 236 Transco Road, Mooresville, Iredell County, North Carolina authorizing the construction and operation of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 02Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the conditions of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested.

This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing. Unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Increment tracking does not apply to this Title V renewal. Although Iredell County's minor source baseline for PM₁₀, NO_x, and SO₂ has been triggered; there are no emissions increases or decreases associated with this change.

This Air Quality Permit shall be effective from January ##, 2017 until December 31, 2021, is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein.

Should you have any questions concerning this matter, please contact Richard R. Simpson, at (919) 707-8476 or Richard.Simpson@ncdenr.gov.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section
Division of Air Quality, NCDEQ

Enclosure

cc: Heather Ceron - EPA Region IV
Bruce Ingle, Acting Supervisor, Mooresville Regional Office
Central Files
Connie Horne (cover letter only)

Insignificant Activities under 15A NCAC 02Q .0503(8)

Emission Source ID	Description
I-1	One hydraulic oil surge tank #12 (79 gallons capacity; No. 0037)
I-2	One hydraulic oil surge tank #13 (79 gallons capacity; No. 0038)
I-3	One LOCW surge tank #1-8 (2160 gallons capacity; No. 0007)
I-4	One lube oil day tank in B-Building (275 gallons capacity; No. 0026)
I-6	One JW surge tank unit #12 (321 gallons capacity; No. 0003)
I-7	One JW surge tank unit #13 (321 gallons capacity; No. 0004)
I-9	One hydraulic oil surge tank #14 (46 gallons capacity; No. 0051)
I-10	One hydraulic oil surge tank #15 (46 gallons capacity; No. 0036)
I-11	One lube oil settling tank in A-Building at #8 (478 gallons capacity; No. 0031)
I-12	One LOCW surge tank #9-11 (2255 gallons capacity; No. 0008)
I-13	One LOCW surge tank #12 (514 gallons capacity; No. 0009)
I-14	One hydraulic oil transfer tank (576 gallons capacity; No. 0040)
I-15	One JW surge tank unit #14 (581 gallons capacity; No. 0005)
I-16	One JW surge tank unit #15 (581 gallons capacity; No. 0006)
I-17	One LOCW surge tank #13 (514 gallons capacity; No. 0010)
I-18	One LOCW surge tank #14 (581 gallons capacity; No. 0011)
I-19	One LOCW surge tank #15 (581 gallons capacity; No. 0012)
I-20	One used oil tank (4,600 gallons capacity; No. 0068)
I-21	One JW surge tank #1-8 (13,514 gallons capacity; No. 0001)
I-22	One JW surge tank #9-11 (5073 gallons capacity; No. 0002)
I-23	One ethylene glycol storage tank (2,500 gallons capacity; No. 0030)
I-24	One lubricating oil storage tank (11,500 gallons capacity; No. 0025)
I-25	One lubricating oil settling tank in A-Building at #13 (1,583 gallons capacity; No. 0032)
I-26	One lubricating oil settling tank in B-Building (1,646 gallons capacity; No. 0033)
I-27	One JW transfer tank (6,500 gallons capacity; No. 0069)
I-28	One turbine lubricating oil tank (2,016 gallons capacity; No. 0066)
I-29	One hydraulic oil storage tank (1,130 gallons capacity; No. 0041)
I-30	One condensate tank (4,200 gallons capacity; No. 0064)
I-31	Engine crankcase vents
I-32	One ethylene glycol storage tank (2,045 gallons capacity; No. 0070)
I-33	One wastewater tank (8,820 gallons capacity; No. 0071)
I-34	One condensate tank (250 gallons capacity; located at Iredell M&R)
I-35	One turbine oil day tank in C-Building (131 gallons capacity)
I-36	One wastewater tank (4000 gallons capacity; North Tank)
I-37	One wastewater tank (4000 gallons capacity; South Tank)
I-FUGS	Piping components fugitive emissions

1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 02D .1100 “Control of Toxic Air Pollutants” or 02Q .0711 “Emission Rates Requiring a Permit”.
3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled “Specific Permit Conditions Regulatory Guide.” The link to this site is as follows: <http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide>.
4. As per 15A NCAC 02D .0902(b)(1), these sources are exempt from RACT with VOC emissions less than 15 pounds per day each. As per 15A NCAC 02D .1402(h)(1), these sources are considered insignificant activities for NOx emissions and are exempt from RACT.

ATTACHMENT 2 to cover letter of Permit No. 08044T17
Transcontinental Gas Pipe Line Co. – Compressor Station 150

The following table lists all modifications associated with this permit action:

Page(s)	Section	Description of Change(s)
Cover and throughout	Throughout	Updated all tables, dates, and permit revision numbers.
Throughout	Throughout	Corrected the regulatory reference from 2D and 2Q to 02D and 02Q.
Attachment 1	Insignificant Activities List	For I-32, updated description to ethylene glycol storage tank instead of wastewater tank.
Attachment 1	Insignificant Activities List	Inserted DEQ web link information in Item No. 3 at bottom of attachment as general information.
3	Section 1	Included column for page numbers.
4-15	Section 2.1.A-F.	In the table, inserted odor regulation with reference to Section 2.2 C.
5 and 10	Section 2.1.(A.2.a and C.2.a)	Added “[15A NCAC 02D .0521(c)]” to the end of the referenced regulation.
5, 7, 12, and 14	Section 2.1.(A.2.b, B.1.a, D.2.a, and E.2.a)	Added “[15A NCAC 02D .0521(d)]” to the end of the referenced regulation.
21	Section 2.2 B.1.d.	Changed wording from assure to ensure.
21	Section 2.2.B.	Inserted 15A NCAC 02D .1806 language for odor regulation.
22-36	General Conditions	Updated to latest version of DAQ shell version 4.0 12/17/15.



State of North Carolina
Department of Environmental Quality
Division of Air Quality

AIR QUALITY PERMIT

Permit No.	Replaces Permit No.(s)	Effective Date	Expiration Date
08044T17	08044T16	January ##, 2017	December 31, 2021

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 02D and 02Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 02Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: **Transcontinental Gas Pipe Line Co. LLC,
– Compressor Station 150**

Facility ID: **4900225**
Facility Site Location: **236 Transco Road**
City, County, State, Zip: **Mooresville, NC, 28115**

Mailing Address: **P.O. Box 1396**
City, State, Zip: **Houston, TX, 77251-1396**

Application Number: **4900225.15A**
Complete Application Date: **January ##, 2017**

Primary SIC Code: **4922**
Division of Air Quality,
Regional Office Address: **Mooresville Regional Office**
610 East Center Avenue, Suite 301
Mooresville, North Carolina, 28115

Permit issued this the ##th day of January, 2017

William D. Willets, P. E., Chief, Permitting Section
By Authority of the Environmental Management Commission

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SECTION 1- PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
4	ES-M/L1 (MACT, Subpart ZZZZ; RACT)	One two-stroke natural gas lean-fired internal combustion engine with low emissions control technology (LEC) turbochargers (rated at 2,050 maximum brake horsepower output and 16.4 million Btu per hour heat input)	NA	NA
4	ES-M/L2 through ES-M/L8 (MACT, Subpart ZZZZ; RACT)	Seven two-stroke natural gas lean-fired internal combustion engines with low emissions control technology (LEC) turbochargers (each rated at 2,050 maximum brake horsepower output and 15.4 million Btu per hour heat input)	NA	NA
4, 20	ES-M/L9 through ES-M/L11 (MACT, Subpart ZZZZ; RACT)	Three two-stroke natural gas lean-fired internal combustion engines with low emissions control technology (LEC) including high pressure fuel injection (HPFi) and high performance turbochargers (each rated at 2,100 maximum brake horsepower output and 14.0 million Btu per hour heat input)	NA	NA
4, 20	ES-M/L12 ES-M/L13 (MACT, Subpart ZZZZ; RACT)	Two two-stroke natural gas lean-fired internal combustion engines with low emissions control technology (LEC) including high pressure fuel injection (HPFi) and high performance turbochargers (each rated at 3,400 maximum brake horsepower output and 23.3 million Btu per hour heat input)	NA	NA
4, 20	ES-M/L14 ES-M/L15 (MACT, Subpart ZZZZ; RACT)	Two two-stroke natural gas lean-fired internal combustion engines with low emissions control technology (LEC) including high pressure fuel injection (HPFi) and high performance turbochargers (each rated at 5,500 maximum brake horsepower output and 37.7 million Btu per hour heat input)	NA	NA
9, 16	ES-AUX1 ES-AUX2 ES-AUX3 [MACT, Subpart ZZZZ]	Three four-stroke natural gas rich-fired internal combustion emergency engines (each rated at 370 maximum brake horsepower output and 2.8 million Btu per hour heat input)	NA	NA
9, 13, and 16	ES-A/C1 ES-A/C2 [MACT, Subpart ZZZZ]	Two four-stroke natural gas rich-fired internal combustion emergency engines (rated at 211 and 194 maximum brake horsepower, respectively)	NA	NA

Page No.	Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
7	ES-M/L16 (NSPS, Subpart GG; MACT, Subpart YYY; RACT)	One natural gas-fired dry low NO _x combustion turbine (rated at 14,060 hp output and 107.9 million Btu per hour heat input)	NA	NA
15	ES-BDO (RACT)	Natural Gas Pipeline Blowdown Operations	NA	NA

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

2.1 - Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, record keeping, and reporting requirements as specified herein:

A. Fifteen two-stroke natural gas lean-fired internal combustion engines (ID Nos. ES-M/L1 through ES-M/L15)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	(ID Nos. ES-M/L1 through ES-M/L14 only) 40 percent opacity (ID No. ES-M/L15 only) 20 percent opacity	15A NCAC 02D .0521
Nitrogen oxides	(ID Nos. ES-M/L1 through ES-M/L8 only) 25.8 pounds per hour each (ID Nos. ES-M/L9 through ES-M/L11 only) 59.4 pounds per hour each (October 1-April 30) (ID Nos. ES-M/L12 and ES-M/L13 only) 91.0 pounds per hour each (October 1-April 30) (ID Nos. ES-M/L14 and ES-M/L15 only) 166.1 pounds per hour each (October 1-April 30)	15A NCAC 02D .0501
Nitrogen oxides	(ID Nos. ES-M/L1 through ES-M/L8 only) 5.7 g/bhp-hr each (Alternative RACT Limitation) (ID Nos. ES-M/L9 through ES-M/L11 only) 3.65 g/bhp-hr each (Alternative RACT Limitation)	15A NCAC 02D .1412
Hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines -No requirements per 63.6590(b)(3)	15A NCAC 02D .1111 (40 CFR 63, Subpart ZZZZ)
Nitrogen oxides	(ID Nos. ES-M/L9 through ES-M/L15 only) See Section 2.2 B.1	15A NCAC 02D .1409

Regulated Pollutant	Limits/Standards	Applicable Regulation
Odors	State-enforceable only See Section 2.2 C.1	15A NCAC 02D .1806

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from these sources (**ID Nos. ES-M/L1 through ES-M/L15**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources (**ID Nos. ES-M/L1 through ES-M/L15**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (**ID Nos. ES-M/L1 through ES-M/L14**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity. [15A NCAC 02D .0521(c)]
- b. Visible emissions from this source (**ID No. ES-M/L15**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

- c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.2.a and b above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- d. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in these sources (**ID Nos. ES-M/L1 through ES-M/L15**).

3. 15A NCAC 02D .0501: COMPLIANCE WITH EMISSION CONTROL STANDARDS

- a. Nitrogen oxide emissions from each of these sources (**ID Nos. ES-M/L1 through ES-M/L8**) shall not exceed 25.8 pounds per hour.
- b. Nitrogen oxide emissions from each of these sources (**ID Nos. ES-M/L9 through ES-M/L11**) shall not exceed 59.4 pounds per hour (October 1 through April 30).
- c. Nitrogen oxide emissions from each of these sources (**ID Nos. ES-M/L12 and ES-M/L13**) shall not exceed 91.0 pounds per hour (October 1 through April 30).
- d. Nitrogen oxide emissions from each of these sources (**ID No. ES-M/L14 and ES-M/L15**) shall not exceed 166.1 pounds per hour (October 1 through April 30).

Testing [15A NCAC 02Q .0508(f)]

- e. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a through d above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- f. No monitoring/recordkeeping/reporting is required for these sources (**ID Nos. ES-M/L1 through ES-M/L15**) other than what is necessary as part of the testing required above.

4. 15A NCAC 02D .1412: PETITION FOR ALTERNATIVE LIMITATIONS

- a. Sources subject to the requirements of Rule .1409(b) of this Section that;
- cannot achieve compliance with the applicable limitation after reasonable effort to satisfy the requirements of Rule .1409 of this Section or if the requirements of Rule .1409 of this Section are not RACT for the particular sources; and
 - cannot provide reasonable assurance for overall compliance at a facility through the implementation of an emissions averaging plan as provided for in Rule .1410 of this Section;
 - shall petition the Director for an alternative limitation according to 15A NCAC 02D .1412(b) or (c). To petition the Director for an alternative limitation, the Permittee shall submit;
 - the name and location of the facility;
 - information identifying the source for which an alternative limitation is being requested;
 - the maximum heat input rate for the source;
 - the fuel or fuels combusted in the source;
 - the maximum allowable NO_x emission rate proposed for the source for each fuel;
 - demonstrate that the sources have satisfied the requirements to apply for an alternative limitation under 15A NCAC 02D .1412(a); and
 - demonstrate that the proposed alternative limitations are RACT for these sources:

Alternative Limitations are as follows:

Emissions Source ID Nos.	Description	Alternative RACT Limits
ES-M/L1 through ES-M/L8	Mainline Units 1-8	5.7 g/bhp-hr
ES-M/L9 through ES-M/L11	Mainline Units 9-11	3.65 g/bhp-hr

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1412.
- c. Under the provisions of NCGS 143-215.108, the Permittee shall demonstrate compliance with the emission limit(s) above by testing two of the internal combustion engines (**ID Nos. ES-M/L1 through ES-M/L8**) and one of the engines (**ID Nos. ES-M/L9 through ES-M/L11**) for nitrogen oxides using reference test methods every year beginning in calendar year 2009 on a rotating schedule so that no engine in either group is retested until all other engines have undergone a performance test, in accordance with a testing protocol approved by the DAQ. For **ID Nos. ES-M/L9 through ES-M/L11**, the testing to demonstrate compliance with this condition may be combined with the testing to demonstrate compliance with Condition 2.2 B.1.c below. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. Testing shall be completed and the results submitted by the end of the year in which the testing occurs unless an alternate date is approved by the DAQ. If the results of this test are above the limit given in Section 2.1 A.4.a.iii above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1412.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- d. No monitoring/recordkeeping/reporting is required for these sources (**ID Nos. ES-M/L1 through ES-M/L11**) other than what is necessary as part of the testing required above.

B. One natural gas-fired dry low NOx combustion turbine (ID No. ES-M/L16)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen oxides	201 ppm at 15 percent oxygen on a dry basis	15A NCAC 02D .0524 (40 CFR 60, Subpart GG)
Sulfur dioxide	150 ppm at 15 percent oxygen on a dry basis	15A NCAC 02D .0524 (40 CFR 60, Subpart GG)
Nitrogen oxides	11.7 pounds per hour	15A NCAC 02D .0501
Nitrogen oxides	75 ppm by volume at 15 percent oxygen (RACT limit)	15A NCAC 02D .1408
Hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines -No applicable requirements per 63.6090(b)(4)	15A NCAC 02D .1111 (40 CFR 63, Subpart YYYY)
Odors	State-enforceable only See Section 2.2 B.1	15A NCAC 02D .1806

1. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. ES-M/L16**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in this source (**ID No. ES-M/L16**).

2. 15A NCAC 02D .0524: NEW SOURCE PERFORMANCE STANDARDS

- a. For this source (**ID No. ES-M/L16**), the Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 02D .0524 “New Source Performance Standards” (NSPS) as promulgated in 40 CFR 60, Subpart GG, including Subpart A “General Provisions.”
- b. The owner or operator shall not cause to be discharged into the atmosphere from this source (**ID No. ES-M/L16**), any gases which contain nitrogen oxides in excess of 201 ppm at 15 percent oxygen on a dry basis as determined from the following equation. [40 CFR 60.332]

$$TD = 0.0150 \times 14.4/Y + F$$

Where: TD = allowable NO_x emissions (percent by volume at 15 percent oxygen and on a dry basis),
Y = manufacturer's rated heat rate at manufacturer's rated load (10.75 kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO_x emission allowance for fuel-bound nitrogen. [40 CFR 60.332(a)(2)]

- c. The owner or operator shall not cause to be discharged into the atmosphere from this source (**ID No. ES-M/L16**), any gases which contain sulfur dioxide in excess of 150 ppm at 15 percent oxygen on a dry basis [40 CFR 60.333(a)]; OR burn any fuel which contains sulfur in excess of 0.8 percent by weight [40 CFR 60.333(b)].

Test Methods [40 CFR 60.335]

- d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.2.b or c above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524.

Monitoring/Recordkeeping [40 CFR 60.334]

- e. The Permittee shall determine and record the sulfur content of the fuel being fired in this source (**ID No. ES-M/L16**) in accordance with the DAQ approved custom fuel monitoring plan; or
- f. As an alternative, the Permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the administrator for subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
- i. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less.

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0524 if neither e nor f is met, or if the sulfur content exceeds the limit in Section 2.1 B.2.c above.

Reporting [15A NCAC 02Q .0508(f)]

- g. The Permittee shall submit a summary report of the monitoring postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

3. 15A NCAC 02D .0501: COMPLIANCE WITH EMISSION CONTROL STANDARDS

- a. Nitrogen oxide emissions from this source (**ID No. ES-M/L16**) shall not exceed 11.7 pounds per hour.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501(e).

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for this source (**ID No. ES-M/L16**) other than what is necessary as part of the testing required above.

4. 15A NCAC 02D .1408: STATIONARY COMBUSTION TURBINES

- a. Unless the Permittee chooses the option of emission averaging under 15A NCAC 02D .1410, emissions of nitrogen oxides from this source (**ID No. ES-M/L16**) shall not exceed 75 ppm by volume corrected to 15 percent oxygen.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.4.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1408.
- c. Compliance with the limitation established for a stationary combustion turbine shall be determined by conducting an annual stack test on or before November 15th of each year (beginning in calendar year 2009) [15A NCAC 02D .1415]. Details of the emissions testing and reporting requirements can be found in Section 3 - General Condition JJ. Testing shall be completed and the results submitted by the end of the year in which the testing occurs unless an alternate date is approved by the DAQ. If the results of this test are above the limit given in Section 2.1 B.4.a.i above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .1408.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The Permittee shall maintain records of tests performed to demonstrate compliance with 15A NCAC 02D .1408. Additional monitoring and records are not required.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the results of the approved stack test compared to the limits.

C. Three four-stroke natural gas rich-fired internal emergency combustion engines (ID Nos. ES-AUX1 through ES-AUX3)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	40 percent opacity	15A NCAC 02D .0521
Nitrogen oxides	10.0 pounds per hour	15A NCAC 02D .0501
Nitrogen oxides	1,892.6 hours each (May 1 through September 30)	15A NCAC 02Q .0317 (RACT Avoidance)
Nitrogen oxides	See Section 2.2 A.1	15A NCAC 02Q .0317 (PSD Avoidance)
Carbon monoxide	See Section 2.2 A.1	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile organic compounds	See Section 2.2 A.1	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous air pollutants	See Section 2.2 A.2 National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines	15A NCAC 02D .1111 (40 CFR 63, Subpart ZZZZ)
Odors	State-enforceable only See Section 2.2 B.1	15A NCAC 02D .1806

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from these sources (**ID Nos. ES-AUX1 through ES-AUX3**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in these sources (**ID Nos. ES-AUX1 through ES-AUX3**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from these sources (**ID Nos. ES-AUX1 through ES-AUX3**) shall not be more than 40 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 40 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 90 percent opacity. [15A NCAC 02D .0521(c)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in these sources (**ID Nos. ES-AUX1 through ES-AUX3**).

3. 15A NCAC 02D .0501: COMPLIANCE WITH EMISSION CONTROL STANDARDS

- a. Nitrogen oxide emissions from these sources (**ID Nos. ES-AUX1 through ES-AUX3**) shall not exceed 10.0 pounds per hour.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 C.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501(e).

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for these sources (**ID Nos. ES-AUX1 through ES-AUX3**) other than what is necessary as part of the testing required above.

**4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 15A NCAC 02D .1402 APPLICABILITY**

- a. In order to avoid the applicability of this regulation, these sources (**ID Nos. ES-AUX1 through ES-AUX3**) shall each be limited to 1,892.6 hours each during the ozone season, May 1 through September 30.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. In order to ensure compliance with the limit above, the hours of operation of these sources (**ID Nos. ES-AUX1 through ES-AUX3**) shall not exceed 1,892.6 hours each per year each during the ozone season, May 1 through September 30.
- c. During ozone season monthly records shall be kept in a logbook (written or electronic format) of the total number of hours of operation of these sources (**ID Nos. ES-AUX1 through ES-AUX3**).
- d. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1400 if the above records are not kept, or if the total hours of operation exceed the limit in Section 2.1 C.4.a above.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly and the total hours of operation during ozone season for the five months during ozone season (May 1 through September 30).

D. One four-stroke natural gas rich-fired internal emergency combustion engine (ID No. ES-A/C1)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen oxides	10.9 pounds per hour	15A NCAC 02D .0501
Nitrogen oxides	Less than 38.2 tons per year	15A NCAC 02Q .0317 (PSD Avoidance)
Nitrogen oxides	3,318.9 hours (May 1 through September 30)	15A NCAC 02Q .0317 (RACT Avoidance)
Hazardous air pollutants	See Section 2.2 A.2 National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines	15A NCAC 02D .1111 (40 CFR 63, Subpart ZZZZ)
Odors	State-enforceable only See Section 2.2 B.1	15A NCAC 02D .1806

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from this source (**ID No. ES-A/C1**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in this source (**ID No. ES-A/C1**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. ES-A/C1**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in this source (**ID No. ES-A/C1**).

3. 15A NCAC 02D .0501: COMPLIANCE WITH EMISSION CONTROL STANDARDS

- a. Nitrogen oxide emissions from this source (**ID No. ES-A/C1**) shall not exceed 10.9 pounds per hour.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501(e).

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for this source (**ID No. ES-A/C1**) other than what is necessary as part of the testing required above.

4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid the applicability of this regulation, this source (**ID No. ES-A/C1**) shall discharge into the atmosphere less than 38.2 tons of nitrogen oxides per consecutive 12-month period.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. In order to ensure compliance with the limit above, the hours of operation of this source (**ID No. ES-A/C1**) shall not exceed 7,000 hours for any twelve-month period.
- c. Monthly records shall be kept in a logbook (written or electronic format) of the number of hours of operation of this source (**ID No. ES-A/C1**).
- d. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept, the nitrogen oxides emissions exceed the limit in Section 2.1 D.4.a above, or the hours of operation exceed the limit in Section 2.1 D.4.b above.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - i. the monthly nitrogen oxide emissions for the previous 17 months. The emissions shall be calculated for each of the 12-month periods over the previous 17 months.
 - ii. the monthly hours of operation for the previous 17 months. The total hours of operation shall be calculated for each of the 12-month periods over the previous 17 months.

**5. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 15A NCAC 02D .1402 APPLICABILITY**

- a. In order to avoid the applicability of this regulation, this source (**ID No. ES-AC1**) shall be limited to 3,318.9 hours during the ozone season, May 1 through September 30.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. In order to ensure compliance with the limit above, the hours of operation of this source (**ID No. ES-A/C1**) shall not exceed 3,318.9 hours per year during the ozone season, May 1 through September 30.
- c. During ozone season monthly records shall be kept in a logbook (written or electronic format) of the total number of hours of operation of this source (**ID No. ES-A/C1**).
- d. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1400 if the above records are not kept, or if the total hours of operation exceed the limit in Section 2.1 D.5.a above.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly and the total hours of operation during ozone season for the five months during ozone season (May 1 through September 30).

E. One four-stroke natural gas rich-fired internal emergency combustion engine (ID No. ES-A/C2)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 02D .0516
Visible emissions	20 percent opacity	15A NCAC 02D .0521
Nitrogen oxides	9.9 pounds per hour	15A NCAC 02D .0501
Nitrogen oxides	3,609.7 hours (May 1 through September 30)	15A NCAC 02Q .0317 (RACT Avoidance)
Hazardous air pollutants	See Section 2.2 A.2 National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines	15A NCAC 02D .1111 (40 CFR 63, Subpart ZZZZ)
Odors	State-enforceable only See Section 2.2 B.1	15A NCAC 02D .1806

1. 15A NCAC 02D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

- a. Emissions of sulfur dioxide from this source (**ID No. ES-A/C2**) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.1.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0516.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas in this source (**ID No. ES-A/C2**).

2. 15A NCAC 02D .0521: CONTROL OF VISIBLE EMISSIONS

- a. Visible emissions from this source (**ID No. ES-A/C2**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 02D .0521(d)]

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.2.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0521.

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas in this source (**ID No. ES-A/C2**).

3. 15A NCAC 02D .0501: COMPLIANCE WITH EMISSION CONTROL STANDARDS

- a. Nitrogen oxide emissions from this source (**ID No. ES-A/C2**) shall not exceed 9.9 pounds per hour.

Testing [15A NCAC 02Q .0508(f)]

- b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 E.3.a above, the Permittee shall be deemed in noncompliance with 15A NCAC 02D .0501(e).

Monitoring/Recordkeeping/Reporting [15A NCAC 02Q .0508(f)]

- c. No monitoring, recordkeeping, or reporting is required for this source (**ID No. ES-A/C2**) other than what is necessary as part of the testing required above.

**4. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS
for 15A NCAC 15A NCAC 02D .1402 APPLICABILITY**

- a. In order to avoid the applicability of this regulation, this source (**ID No. ES-AC2**) shall be limited to 3,609.7 hours during the ozone season, May 1 through September 30.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. In order to ensure compliance with the limit above, the hours of operation of this source (**ID No. ES-A/C2**) shall not exceed 3,609.7 hours per year during the ozone season, May 1 through September 30.
- c. During ozone season monthly records shall be kept in a logbook (written or electronic format) of the total number of hours of operation of this source (**ID No. ES-A/C2**).
- d. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1400 if the above records are not kept, or if the total hours of operation exceed the limit in Section 2.1 E.5.a above.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly and the total hours of operation during ozone season for the five months during ozone season (May 1 through September 30).

F. Natural Gas Pipeline Blowdown Operations (ID No. ES-BDO)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Volatile organic compounds	Less than 40 tons per year	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile organic compounds	RACT – no additional controls required	15A NCAC 02D .0902
Odors	State-enforceable only See Section 2.2 B.1	15A NCAC 02D .1806

1. 15A NCAC 02Q. 0317: AVOIDANCE CONDITIONS for 15A NCAC 02D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid applicability of this regulation, this source (**ID No. ES-BDO**) shall discharge into the atmosphere less than 40 tons of VOCs per consecutive 12-month period.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. Calculations of VOC emissions per month shall be made at the end of each month. VOC emissions shall be determined by multiplying the total amount of each type of VOC-containing material emitted during the month by the VOC content of the material. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the amounts of VOC containing materials or the VOC emissions are not monitored and recorded.
- c. Calculations and the total amount of VOC emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the VOC emissions exceed the limit in 2.1.F.1.a above.

Reporting [15A NCAC 02Q .0508(f)]

- d. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the monthly VOC emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.

2. 15A NCAC 02D. 0902: APPLICABILITY

- a. Based on the review of Permit Application **4900225.08B** the DAQ has determined that Reasonably Available Control Technology (RACT) for the emission source above is no additional controls.
- b. Other sources as designated in this permit are exempt from RACT as emissions are less than 15 pounds per day [15A NCAC 02D .0902(b)(1)].

2.2 - Multiple Emission Source(s) Specific Limitations and Conditions

A. Three four-stroke natural gas rich-fired internal combustion engines (ID Nos. ES-AUX1 through ES-AUX3)

One four-stroke natural gas rich-fired internal combustion engine (ID No. ES-A/C1)

One four-stroke natural gas rich-fired internal combustion engine (ID No. ES-A/C2)

The following table provides a summary of limits and/or standards for the emission source(s) described above.

Regulated Pollutant	Limits/Standards	Applicable Regulation
Nitrogen oxides	(ID Nos. ES-AUX1 through ES-AUX3 only) Less than 7.8 tons per year	15A NCAC 02Q .0317 (PSD Avoidance)
Carbon monoxide	(ID Nos. ES-AUX1 through ES-AUX3 only) Less than 0.6 tons per year	15A NCAC 02Q .0317 (PSD Avoidance)
Volatile organic compounds	(ID Nos. ES-AUX1 through ES-AUX3 only) Less than 1.5 tons per year	15A NCAC 02Q .0317 (PSD Avoidance)
Hazardous air pollutants	National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines	15A NCAC 02D .1111 (40 CFR 63, Subpart ZZZZ)

1. 15A NCAC 02Q .0317: AVOIDANCE CONDITIONS

for 15A NCAC 02D .0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. In order to avoid applicability of this regulation, these sources (ID Nos. ES-AUX1 through ES-AUX3) shall discharge into the atmosphere less than 7.8, 0.6, and 1.5 tons per year of nitrogen oxides, carbon monoxide, or volatile organic compounds, respectively, per consecutive 12-month period.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- b. In order to ensure compliance with the limit above, the combined hours of operation of these sources (ID Nos. ES-AUX1 through ES-AUX3) shall not exceed 2160 hours for any twelve-month period.
- c. Monthly records shall be kept in a logbook (written or electronic format) of the number of hours of operation of these sources (ID Nos. ES-AUX1 through ES-AUX3).
- d. The Permittee shall be deemed in noncompliance with 15A NCAC 02D .0530 if the above records are not kept, the nitrogen oxides, carbon monoxide, or volatile organic compound emissions exceed the limit in Section 2.2 A.1.a above, or the hours of operation exceed the limit in Section 2.2 A.1.b above.

Reporting [15A NCAC 02Q .0508(f)]

- e. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
 - i. the monthly nitrogen oxide, carbon monoxide, and volatile organic compound emissions for the previous 17 months. The emissions shall be calculated for each of the 12-month periods over the previous 17 months.
 - ii. the monthly hours of operation for the previous 17 months. The total hours of operation shall be calculated for each of the 12-month periods over the previous 17 months.

2. 15A NCAC 02D .1111: MAXIMUM ACHIEVABLE CONTROL TECHNOLOGY

Applicability [40 CFR 63.6585, 63.6590(a)(1)(ii)]

- a. For this emission source (an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions), the Permittee shall comply with all applicable

provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines" and Subpart A "General Provisions."

Definitions and Nomenclature

- b. For the purposes of this permit condition, the definitions and nomenclature contained in 40 CFR 63.6675 shall apply.

Applicability Date [40 CFR 63.6595(a)(1)]

- c. The Permittee shall comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

Notifications [40 CFR 63.6645(a)(5)]

- d. The Permittee has no notification requirements.

General Provisions [40 CFR 63.6665]

- e. The Permittee shall comply with the General Provisions as applicable pursuant to Table 8 of 40 CFR 63 Subpart ZZZZ

Operating and Maintenance Requirements [15A NCAC 02Q .0508(b)]

- f. During periods of startup of the IC engine, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6602 and 63.6625(h)]
- g. Except during periods of startup of the IC engine, the Permittee shall:
 - i. Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - ii. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and
 - iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary[40 CFR 63.6602, Table 2c]
- h. The Permittee shall have the option to utilize the oil analysis program as described in 40 CFR 63.6625(i) in order to extend the specified oil change requirement in condition g. [40 CFR 63.6602, Table 2c, 63.6625(i)]
- i. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in condition g., or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63.6602, Table 2c]
- j. The permittee shall be in compliance with the emission limitations, operating limitations and other requirements in this subpart that apply at all times. [40 CFR 63.6605(a)]
- k. The Permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved.

Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

- l. The Permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e) and 63.6640(a), Table 6]
- m. In order for the engine to be considered an emergency stationary RICE under this condition, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) through (3) below, is prohibited.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) The Permittee may emergency stationary RICE for any combination of the purposes specified in paragraphs (i) through (iii) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (3) below counts as part of the 100 hours per calendar year allowed by this paragraph (2).

- (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine.

The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

- (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (2) above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 CFR 63.6640(f)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if conditions e. through m. are not met.

Monitoring [15A NCAC 02Q .0508(f)]

- n. The Permittee shall install a non-resettable hour meter on the IC engine if one is not already installed. [40 CFR 63.6625(f)]

Recordkeeping [15A NCAC 02Q .0508(f)]

- o. The Permittee shall keep the following:
 - i. A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]
 - ii. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
 - iii. Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
 - iv. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition k., including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
 - v. Records of the maintenance conducted on the RICE pursuant to condition l. [40 CFR 63.6655(d) and (e)]
 - vi. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The Permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in (m)(2)(ii) or (iii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]
- p. The Permittee shall keep each record in a form suitable and readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). [40 CFR 63.6660(a), (b), (c)]

The Permittee shall be deemed in noncompliance with 15A NCAC 02D .1111 if conditions n. through p. are not met.

Reporting [15A NCAC 02Q .0508(f)]

- q. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of noncompliance must be clearly identified. [40 CFR 63.6640(b),(e), and 63.6650(f)]
 - i. The summary report shall also include any reporting required under condition i., as necessary. [40 CFR 63.6602, Table 2c]
- r. If the Permittee owns or operates an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in condition (m)(2)(ii) and (iii), the Permittee shall submit an annual report according to the requirements at 40 CFR 63.6650(h). This report must be submitted to the Regional Supervisor and the EPA. [40 CFR 63.6650(h)]

The Permittee shall be deemed in noncompliance with the reporting requirements of 15A NCAC 02D .1111 if conditions q. and r. are not met.

B. Seven two-stroke natural gas lean-fired internal combustion engines (ID Nos. ES-M/L9 through ES-M/L15)

1. 15A NCAC 02D .1409: SEASONAL EMISSION RATE FOR LARGE COMBUSTION SOURCES

- a. The sum of nitrogen oxides emissions from these sources (**ID Nos. ES-M/L9 through ES-M/L15**) shall not exceed 328 tons per season for the respective ozone season (May 1 through September 30).

Testing [15A NCAC 02Q .0508(f)]

- b. The Permittee shall perform a minimum of nine stack tests runs to establish a correlation between engine operating parameters and NO_x emissions for each engine using the following equation and constants A, B, and C referenced below:

$$AMP_C = \left[\frac{\left(AF_{ST} \times (0.0765 \times FSG) \times \frac{FF_{SCFM}}{RPM} \times (AMT + 460) \right)}{(2.699 \times TER_C \times V_{TRAP})} - 14.73 \right] \times 2.036$$

Where:

AF _{ST}	= Stoichiometric Air/Fuel Ratio
FSG	= Fuel Gas Specific Gravity
FF _{SCFM}	= Unit Fuel Flow Rate in SCFM
RPM	= Unit speed in RPM
AMT	= Air Manifold Temperature = °F
TER _C	= Critical Trapped Equivalence Ratio
V _{TRAP}	= Engine Trapped Volume = ft ³
AMP _C	= Critical Air Manifold Pressure = Inches Hg

And:

$$TER_C = A \times \left(\frac{FF_{SCFM}}{RPM} \right)^2 + B \times \left(\frac{FF_{SCFM}}{RPM} \right) + C$$

Where:

A, B, and C = Constants determined based upon initial performance testing of the affected unit

- c. After the initial testing required above, the Permittee shall perform annual portable analyzer NO_x emission tests on one engine of each model type during the ozone season using EPA approved tests methods. For engine groups comprised of two or more engines, (three such groups comprising ES-M/L9 through ES-M/L11, ES-M/L12 through ES-M/L13 and ES-M/L14 through ES-M/L15), a different engine from each engine group shall be tested each year. If the tested hourly NO_x emissions are greater than those listed in 2.2 B.1.e, the Permittee shall repeat, for that unit, the testing required in 2.2 B.1.b to re-establish the correlation between engine operating parameters and NO_x emissions for that engine. All testing shall be performed in accordance with General Condition JJ.

Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- d. The Permittee shall install, calibrate, maintain, and operate during each ozone season a parametric emissions monitoring system as per manufacturers specification. The monitoring system shall collect at a minimum four or more data values equally spaced over each hour and record the following operating parameters at the specified frequencies:

Fuel Flow (FF_{SCFM}) in SCFM on an hourly basis
 Engine Speed (RPM) on an hourly basis
 Air Manifold Temperature (AMT) in degrees F on an hourly basis
 Critical Trapped Equivalence Ratio (TER_C) on an hourly basis
 Engine Trapped Volume (V_{TRAP}) in ft^3 on an hourly basis
 Actual Air Manifold Pressure (AMP_{ACT}) in inches of Hg on an hourly basis
 Critical Air Manifold Pressure (AMP_C) in inches of Hg on an hourly basis

If the three hour average of actual air manifold pressure (AMP_{ACT}) of any one unit is less than the calculated air manifold pressure (AMP_C) for that unit three times during any ozone season, the Permittee shall repeat, for that unit, the testing required in 2.2 B.1.b to re-establish the correlation between parameter levels that indicate proper operation of that engine and ensure compliance with the NO_x limit. Testing shall be completed and results submitted to the Division of Air Quality within 90 days of the third occurrence.

- e. At the conclusion of each ozone season, the Permittee shall calculate the seasonal NO_x emissions for each unit and the total NO_x emissions for that season from all engines. The NO_x emissions shall be determined by multiplying the hours of operation for each unit during the ozone season by the hourly NO_x emissions rate from the following table. If the results of the required annual portable analyzer NO_x emissions test per Section 2.2 B.1.c above, are higher than the emission rates from the following table, the Permittee shall use the higher rate in determining the NO_x emissions from that engine. Otherwise, the Permittee shall use the rates in the following table. The Permittee shall be deemed in noncompliance if the total NO_x emissions exceed the limit in 2.2 B.1.a above.

Unit	Hourly NO_x Emissions Rate (lbs/hr)
ES-M/L9	16.9
ES-M/L10	16.9
ES-M/L11	16.9
ES-M/L12	24.4
ES-M/L13	24.4
ES-M/L14	39.4
ES-M/L15	39.4

Reporting [15A NCAC 02Q .0508(f)]

- f. The Permittee shall submit a summary report of monitoring and record keeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

C. Facility-wide affected sources

(STATE-ENFORCEABLE ONLY REQUIREMENT)

1. 15A NCAC 02D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

- a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

SECTION 3 - GENERAL CONDITIONS (version 4.0 12/17/15)

This section describes terms and conditions applicable to this Title V facility.

A. **General Provisions** [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

C. **Severability Clause** [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [15A NCAC 02Q .0507(e) and 02Q .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. **Permit Modifications**

1. Administrative Permit Amendments [15A NCAC 02Q .0514]
The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505]
The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
3. Minor Permit Modifications [15A NCAC 02Q .0515]
The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
4. Significant Permit Modifications [15A NCAC 02Q .0516]
The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02Q .0516.
5. Reopening for Cause [15A NCAC 02Q .0517]
The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

H. **Changes Not Requiring Permit Modifications**

1. Reporting Requirements
Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:
 - a. changes in the information submitted in the application;
 - b. changes that modify equipment or processes; or
 - c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. the changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and

- iv. the Permittee shall attach the notice to the relevant permit.
- c. The written notification shall include:
 - i. a description of the change;
 - ii. the date on which the change will occur;
 - iii. any change in emissions; and
 - iv. any permit term or condition that is no longer applicable as a result of the change.
- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
- 3. Off Permit Changes [15A NCAC 02Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

 - a. the change affects only insignificant activities and the activities remain insignificant after the change; or
 - b. the change is not covered under any applicable requirement.
- 4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations

[15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

“Excess Emissions” - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. *(Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.)*

“Deviations” - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

- 1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
- 2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
 - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
 - name and location of the facility;
 - nature and cause of the malfunction or breakdown;
 - time when the malfunction or breakdown is first observed;
 - expected duration; and
 - estimated rate of emissions;
 - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
 - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

Permit Deviations

3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. the permitted facility was at the time being properly operated;
 - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. Permit Renewal [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

L. **Need to Halt or Reduce Activity Not a Defense** [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

M. **Duty to Provide Information (submittal of information)** [15A NCAC 02Q .0508(i)(9)]

1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

P. **Compliance Certification** [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

1. the identification of each term or condition of the permit that is the basis of the certification;
2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
3. whether compliance was continuous or intermittent; and
4. the method(s) used for determining the compliance status of the source during the certification period.

Q. **Certification by Responsible Official** [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. **Permit Shield for Applicable Requirements** [15A NCAC 02Q .0512]

1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
2. A permit shield shall not alter or affect:

- a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. the applicable requirements under Title IV; or
 - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
 4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

S. Termination, Modification, and Revocation of the Permit [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

1. the information contained in the application or presented in support thereof is determined to be incorrect;
2. the conditions under which the permit or permit renewal was granted have changed;
3. violations of conditions contained in the permit have occurred;
4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. Insignificant Activities [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. Property Rights [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. Inspection and Entry [15A NCAC 02Q .0508(l) and NCGS 143-215.3(a)(2)]

1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
 - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. inspect at reasonable times and using reasonable safety practices any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. Annual Fee Payment [15A NCAC 02Q .0508(i)(10)]

1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.

3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

X. **Annual Emission Inventory Requirements** [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. **Confidential Information** [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

Z. **Construction and Operation Permits** [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

AA. **Standard Application Form and Required Information** [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

BB. **Financial Responsibility and Compliance History** [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. **Refrigerant Requirements (Stratospheric Ozone and Climate Protection)** [15A NCAC 02Q .0501(e)]

1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. **Prevention of Accidental Releases - Section 112(r)** [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. **Prevention of Accidental Releases General Duty Clause - Section 112(r)(1) -
FEDERALLY-ENFORCEABLE ONLY**

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. **Title IV Allowances** [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's

emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. Air Pollution Emergency Episode [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - (1) Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - (2) Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - (3) Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance

of permitted emission sources or pollutants.

- b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

KK. Reopening for Cause [15A NCAC 02Q .0517]

1. A permit shall be reopened and revised under the following circumstances:
 - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. During operation the monitoring recordkeeping and reporting requirements as prescribed by the permit shall be implemented within the monitoring period.

MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540] - STATE ENFORCEABLE ONLY

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. **Specific Permit Modifications** [15A NCAC 02Q.0501 and .0523]

1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA - Air Planning Branch, 61 Forsyth St. SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
 - a. a description of the change at the facility;
 - b. the date on which the change will occur;
 - c. any change in emissions; and
 - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

OO. **Third Party Participation and EPA Review** [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT

List of Acronyms

AOS	Alternate Operating Scenario
BACT	Best Available Control Technology
Btu	British thermal unit
CAA	Clean Air Act
CAIR	Clean Air Interstate Rule
CEM	Continuous Emission Monitor
CFR	Code of Federal Regulations
DAQ	Division of Air Quality
DEQ	Department of Environmental Quality
EMC	Environmental Management Commission
EPA	Environmental Protection Agency
FR	Federal Register
GACT	Generally Available Control Technology
HAP	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
NAA	Non-Attainment Area
NCAC	North Carolina Administrative Code
NCGS	North Carolina General Statutes
NESHAPS	National Emission Standards for Hazardous Air Pollutants
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standard
OAH	Office of Administrative Hearings
PM	Particulate Matter
PM₁₀	Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less
POS	Primary Operating Scenario
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO₂	Sulfur Dioxide
tpy	Tons Per Year
VOC	Volatile Organic Compound